# CS 255 System Design Document

## UML Diagrams

### UML Use Case Diagram

Figure (A): DriverPass Use Case UML Diagram

Diagram

Description automatically generated

### UML Activity Diagrams

Figure (B): Package Purchase Activity UML Diagram

### Diagram Description automatically generated

Figure (C): Reservation Activity UML Diagram

Diagram

Description automatically generated

### UML Sequence Diagram

Figure (D): Reservation Sequence UML Diagram

Diagram

Description automatically generated

### UML Class Diagram

Figure (E): DriverPass Class UML Diagram

### Diagram, schematic Description automatically generated

## Technical Requirements

|  |  |
| --- | --- |
| Requirement | Technical Requirement |
| Web-based application | * Accessed through a web browser, either from desktop or mobile device. * Server that runs the application environment, stores the data from users and site. * Continual software updates. |
| Security | * Verification for different types of log ins: Customer, Employee, Administrator.\] * Authorization and permissions only allowed for specific users and individuals. * Notifications when there are possible security breaches. * Account locks if incorrect information is done repeatedly. |
| DMV Database Access | * Continual communications with official DMV rules. * Update classes and tests as DMV policy changes. * Update in-person driving lessons, and what needs to be covered based on the DMV handbook and policies. |
| REST API | * Modularity that will allow the system to make changes in the future without changing other portions of the application. |
| User Interface | * Organized Main page so everything is easy to understand and find. * Web pages should be concise and clear to understand, explicit in naming to express where they lead. * Assistance for using the interface and navigation of the system. |